



A Partnership
Profession  orations

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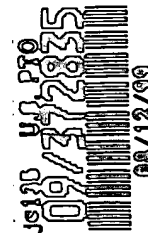
Greenwich
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Bonita Springs
Naples
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MUMMINGS & LOCKWOOD



August 5, 1999

R. Thomas Payne
203-351-4192
tpayne@cl-law.com



Docket Number: 774976.0007 (DGR-106.1)
Prior Application: 09/934,121
Examiner: Church, C.
Art Unit: 2876

Assistant Commissioner for Patents
Box Continuation
Washington, D.C. 20231

Sir:

This is a Request for filing a continuation-in-part
 X continuation
 divisional

application under 37 CFR 1.53 of prior application Serial No. 09/934,121, filed on September 19, 1997, entitled **AN INTERMEDIATE DENSITY MARKER AND A METHOD FOR USING SUCH A MARKER FOR RADIOGRAPHIC EXAMINATION** by the following named inventor(s):

Full Name of Inventor	Family Name Russell	First Given Name Donald	Second Given Name G.
Residence & Citizenship	City Kensington	State or Foreign Country Connecticut	Country of Citizenship U.S.
Post Office Address	Post Office Address 86 Windsor Road	City Kensington	State & Zip Code/Country Connecticut 06037

1. Enter the amendment previously filed on January 6, 1999 under 37 CFR 1.116 in the prior application.

CERTIFICATE OF MAILING/TRANSMISSION

I hereby certify that this correspondence, is, on the date shown below, being:

MAILING	FACSIMILE
<input type="checkbox"/> deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, DC 20231.	<input type="checkbox"/> transmitted by facsimile to the Patent and Trademark Office.
<input checked="" type="checkbox"/> deposited with the United States Postal Service with sufficient postage as Express Mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, DC 20231. EXPRESS MAIL #EL	DATE: August 10, 1999 <i>Theresa D. Recupido</i> THERESA D. RECUPIDO

2. A preliminary amendment is enclosed. By way of this Preliminary Amendment, Claims _____ in the prior application have been canceled (without prejudice).

3. The filing fee is calculated on the basis of the claims existing in the prior application as amended at 1 and 2 above.

X 4. The filing fee is calculated on the basis of the claims existing in the subject application.

Large Entity

Claims	(1) For	(2) Number filed	(3) Number extra	(4) Rate	(5) Calculations
	Total Claims			X \$ 18.00	\$
	Independent Claims			X \$ 78.00	\$
	Multiple Dependent Claim(s) (if applicable)			+ \$ 270.00	\$
			Basic Fee		+ \$ 760.00
	Total of above Calculations =				\$
			Other		\$
			TOTAL		\$

Small Entity

Claims	(1) For	(2) Number filed	(3) Number extra	(4) Rate	(5) Calculations
	Total Claims	19	0	X \$ 9.00	\$
	Independent Claims	4	1	X \$ 39.00	\$39.00
	Multiple Dependent Claim(s) (if applicable)			+ \$ 130.00	
			Basic Fee		\$ 380.00
	Total of above Calculations =				\$
			Other		\$
			TOTAL		\$419.00

X The Commissioner is hereby authorized to charge fees under 37 CFR 1.16 and 1.17 which may be required, or credit any overpayment to Deposit Account No. 11-0231. A duplicate copy of this sheet is enclosed.

X A check in the amount of \$419.00 is enclosed.

A new Oath or Declaration is included since this application is a continuation-in-part which discloses and claims additional matter.

DEPT OF HEALTH & HUMAN SERVICES

-3-



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
08/934,121	09/19/97	RUSSELL	3840-02-1-1

EXAMINER
CHURCH, C

B2M1/0320
MCCORMICK PAULDING AND HUBER
CITYPLACE II
185 ASYLUM STREET
HARTFORD CT 06103-4102

ART UNIT	PAPER NUMBER
2506	10

DATE MAILED: 03/20/98

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-9, 20-29 is/are pending in the application.
Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-9, 20-29 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--SEE OFFICE ACTION ON THE FOLLOWING PAGES--

Serial No. 372,658
Art Unit 2506

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Claims 20-29 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 20, 21, 25 and 26 are improperly written in functional language rather than in a positive recitation of the elements that comprise the structure. Claims 21 and 26 fail to further define the structure of parent claims 20 and 25 since the x-ray source is not claimed. The marker's absorption characteristics are determined by its composition and thickness.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1, 9, 20 and 25 are rejected under 35 U.S.C. § 102(e) as being anticipated by Zinreich. Zinreich teaches a marker system comprising radiolucent markers 20 formed from gels comprising barium selected to yield a desired x-ray density under exposure to specified radiation energy so as not to obscure the desired image. See lines 2-5 of column 3 and lines 12-15 of column 6.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 2-8, 21-24 and 26-29 are rejected under 35 U.S.C. § 103 as being unpatentable over Zinreich. Zinreich does not specify transmission percentages, but it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ 2%-75% transmission in order to achieve the results that he specifies. Lines 12-15 of column 6 suggest the use of other metals, and aluminum would have been obvious because of its midrange atomic number.

Claims 1-29 are rejected under 35 U.S.C. § 103 as being unpatentable over DeSena. DeSena teaches a marker system comprising adhesive markers 3 bearing patterns formed of barium or aluminum (lines 11-13 of column 3). Lines 62-65 of column 4 suggest that the clarity of the patterns is controlled by their thickness, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the thickness of the DeSena marks to provide the desired opacity under

Serial No. 372,658
Art Unit 2506


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specified parameters such as x-ray energy.

Applicant's arguments filed September 19, 1997 have been fully considered but they are not deemed to be persuasive. The concept of a partially x-ray transparent marker is clearly taught by the prior art. The particular x-ray energy or environment that may (or may not) be used is not relevant to patentability of the marker per se.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Krupnick teaches markers of barium or aluminum (lines 25-39 of column 4), and Bayonnet teaches an aluminum marker that is semitransparent (50-54 of column 2).

Any inquiry concerning this communication should be directed to Examiner Church at telephone number (703) 308-4861.



CRAIG E. CHURCH
Senior Examiner
ART UNIT 2506



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NUMBER	08/934,121	FILING DATE	09/19/97	FIRST NAMED APPLICANT	RUSSELL	ATTY. DOCKET NO.	D 0840-02-1-1
EXAMINER							
MMS1/0915							
MCCORMICK PAULDING AND HUBER							
CITYPLACE II							
185 ASYLUM STREET							
HARTFORD CT 06103-4102							
DATE MAILED:						03/15/98	

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 6/29/98

☒ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-9, 20-32 is/are pending in the application.
Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-9, 20-32 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☐ Notice of Reference Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--SEE OFFICE ACTION ON THE FOLLOWING PAGES--

Serial No. 934,121
Art Unit 2876

-2-

Claims 20-29 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 20, 21, 25 and 26 are improperly written in functional language rather than in a positive recitation of the elements that comprise the structure. Claims 21 and 26 fail to further define the structure of parent claims 20 and 25 since the x-ray source is not claimed. The marker's absorption characteristics are determined by its composition and thickness.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1, 9, 20 and 25 are rejected under 35 U.S.C. § 102(e) as being anticipated by Zinreich. Zinreich teaches a marker system comprising radiolucent markers 20 formed from gels comprising barium selected to yield a desired x-ray density under exposure to specified radiation energy so as not to obscure the desired image. See lines 2-5 of column 3 and lines 12-15 of column 5.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 2-8, 21-24 and 26-32 are rejected under 35 U.S.C. § 103 as being unpatentable over Zinreich. Zinreich does not specify transmission percentages, but It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ 2% to 25% transmission in order to achieve the results that he specifies. Lines 12-15 of column 6 suggest the use of other metals, and aluminum would have been obvious because of its midrange atomic number.

Claims 1-32 are rejected under 35 U.S.C. § 103 as being unpatentable over DeSena. DeSena teaches a marker system comprising adhesive markers 3 bearing patterns formed of barium or aluminum (lines 11-13 of column 3). Lines 62-65 of column 4 suggest that the clarity of the patterns is controlled by their thickness, and It would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the thickness of the DeSena markers to provide the desired opacity

Serial No. 934,121
Art Unit 2876

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under the specified parameters such as x-ray energy.

Claim 30 is rejected under 35 U.S.C. § 103 as being unpatentable over a piece of aluminum.

Applicant's arguments filed June 29, 1998 have been fully considered but they are not deemed to be persuasive. As to the § 112 rejections on functional language, the claimed functions are inherent in the prior art.

Applicant's assertion that the discussion in column 2 of Zinreich is directed only to CT imaging is faulty and misleading. Line 13 refers to both "X-rays and CT scans". Lines 2-5 of column 5 explain:

The improved multi-modality surface markers of the present invention are visible to many imaging methods and do not produce undesirable images which obscure portions of desirable images.

This appears to be applicant's invention.

The concept of a partially transparent x-ray marker is clearly taught by the prior art. The particular x-ray energy or environment that may (or may not) be used is not relevant to patentability of the marker per se.

Applicant's attempt to discredit DeSena because he teaches outline marker patterns is not understood since applicant fails to recite any pattern himself. What DeSena does teach is that the degree of radiopacity is determined by the thickness of the aluminum marker (lines 62-65 of column 4).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

Serial No. 934,121
Art Unit 2876

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A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication should be directed to Examiner Church at telephone number (703) 308-4861.

Craig E Church

CRAIG E. CHURCH
Senior Examiner
ART UNIT 2876